Group A Streptococcal Infections

March 2003

What is group A streptococcus (GAS)?

Group A streptococci are bacteria. These bacteria are often found in the throat and on the skin, and they don't always make people sick. When people do get sick from GAS, they can have mild illnesses or serious ones. The most common illness caused by GAS is strep throat. Serious illness happens when the GAS bacteria invade parts of the body such at the blood or the fat and tissue around muscle. GAS can sometimes enter the body through a wound or other opening in the skin and cause a serious illness.

How are group A streptococci spread?

These bacteria are spread by direct contact with nose and throat discharges of an infected individual or with infected skin lesions. The risk of spread is greatest when an individual is ill, such as when people have strep throat or an infected wound. People who carry the bacteria but have no symptoms are much less contagious. People are not contagious after they have been treated with an appropriate antibiotic for 24 hours or longer; however, it is important to take all the antibiotics as prescribed. Casual contact (as in work and school) and household items (like plates, cups, toys, etc.) rarely play any role in spreading the bacteria.

Why does invasive group A streptococcal disease occur?

Invasive group A streptococcal infections occur when the bacteria get past the defenses of the person who is infected. This may occur when a person has sores or other breaks in the skin that allow the bacteria to get into the tissue. Health conditions that affect a person's immunity also make invasive disease more likely. In addition, certain strains of GAS are more likely to cause severe disease than others.

Who is most at risk of invasive group A streptococcal disease?

Most people who come in contact with a powerful strain of GAS will have a routine throat or skin infection and some may have no symptoms at all. Very few will develop invasive GAS disease. Although healthy people can get invasive GAS disease, people with chronic illnesses like cancer, diabetes, and heart and lung problems, those on kidney dialysis, and those who use medications such as steroids, are at higher risk. IV drug use and alcoholism also increase the risk for these infections. In addition, breaks in the skin, like cuts, surgical wounds or chickenpox may provide an opportunity for the bacteria to enter the body.

Can invasive group A streptococcal disease be treated?

Group A streptococcus bacteria can be treated with common, inexpensive antibiotics. In addition to antibiotics, care in an intensive care unit and sometimes surgery are necessary. Early treatment may reduce the risk of death but, unfortunately, even appropriate therapy does not prevent death in every case.

Should contacts of individuals with invasive group A streptococcal disease be tested and treated?

There have been no reports of casual contacts, like co-workers or school and daycare classmates, developing invasive GAS disease following contact with a person with invasive GAS disease. However, in rare instances, household members have developed severe disease. Therefore, the health department will evaluate each household on an individual basis. Antibiotics may be recommended for households having persons with underlying disease (such as diabetes, cancer, chronic heart disease, alcoholism) since these conditions increase the risk of invasive disease. Household members who have a sore throat or skin lesions should see their physician to evaluate whether they have a strep infection.

What can be done to help prevent invasive group A streptococcal infections?

The spread of all types of group A streptococcal infections may be reduced by good handwashing, especially after coughing and sneezing; before and after caring for an ill person; and before preparing foods and before eating. Anyone with a bad sore throat should see a doctor. If tests show that it is strep throat, the ill person should stay home from work, school or daycare until antibiotics have been taken for at least 24 hours. All wounds should be kept clean. Wounds should be watched for possible signs of infection such as increasing redness, swelling and pain at the wound site. If these signs occur, especially in a person who also has a fever, consult a doctor immediately.

VDH VIRGINIA DEPARTMENT OF HEALTH

Protecting You and Your Environment